DEPARTMENT OF DEFENSE BLOGGERS ROUNDTABLE WITH COLONEL MICHAEL MOON,
DIRECTOR, ELECTRICAL SECTOR DEVELOPMENT, GULF REGION DIVISION, ARMY
CORPS
OF ENGINEERS (VIA TELECONFERENCE)

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(Note: Please refer to www.defendamerica.mil for more information.)

COL. MOON: I'm Colonel Mike Moon. I am the director of Electrical Sector Development at the Gulf Region Division, Corps of Engineers. I've been here about five weeks. I recently came from Carlisle, Pennsylvania, from the United States Army Peacekeeping and Stability Operations Institute, where I was the infrastructure engineer working on rehabilitation and post-conflict operations, and how you integrate engineering into improving, you know, the lot in life, say, of the locals or whatever nation you're working in.

Part of my preparation, you know -- and the job was perfect to prepare to come here to Iraq and work in the engineering electrical sector, since that's what I was focused in -- focused on in the Peacekeeping and Stability Operations Institute -- part of my preparation also is, I visited the North American Electric Reliability Corporation, the Edison Electrical Institute and a couple of big power commercial companies in order to learn a little bit more about grid management, electricity generation. Again, that was all just preparation to come and do this job.

Since I've been here, a little over five weeks, we're obviously going into the heat of the summer. There's a lot of interest in what we're doing with electricity, maintenance of our current generators, getting our projects done, in order to meet the increasing demand of the summertime.

One good, positive trend is that actually our generation numbers are increasing. And yesterday we put out over 5,000 megawatts onto the grid, which is a great milestone. And it's been an upward trend for about the last 30 days, keeping in mind that demand has also been increasing during that time period.

Another good indicator in terms of the work that's progressing is in the transmission sector. We've recently completed repairs on a very critical 400-kilovolt overhead transmission line between Haditha, out in the west, and Baghdad West Substation. That was an isolated power generation unit, essentially, that dam, hydroelectric dam, and by linking it back to the grid, that has improved dramatically some of the electricity that's available and getting into Baghdad.

And again, yesterday, at over 5,000 megawatts, we met 56 percent of the demand for the country of Iraq, and we met just over 50 percent of the demand for Baghdad. And that is very much up over the last month and a half.

That's kind of just a real quick snapshot of me and where we are, and I'll be ready to take questions at this time.

MODERATOR: All right, sir. Excellent. Just really good stuff.

Charlie, since you were first on the line, why don't you go first?

Q Yeah. Colonel, this is Charlie Quidnunc with the Whizbang podcast. I think the last time we had an update, the favorable news that we were getting was that at least

half the country had more electricity than they did before or for -- it was some measure like that. When you're tracking these numbers, what numbers do you track in terms of improvements in the electrical grid, compared to what it was prewar or what it was postwar or --

COL. MOON: Okay. I understand.

And the best way to frame this answer, unfortunately, is I do got to give you a little bit of history, and that is let's go right back to March of 2003. The country of Iraq was receiving about four to eight hours of power a day, and Baghdad was receiving the lion's share, about 16 to 24 hours of power. Even before Operation Iraqi Freedom, there was not 24-hour, you know, electricity for the entire country. Saddam used electricity, you know, like a mob boss passes out favors. He typically made sure Baghdad got the lion's share, and whatever else, he kind of passed around to whatever tribes and regions that he was favorably disposed to for the day or the week.

After Operation Iraqi Freedom, 75 percent of Iraq automatically was receiving twice as much power as they did before; unfortunately, for the residents of Baghdad who were used to that lion's share, they saw the reduction. But again, in terms of the overall Iraqi population, 75 percent were getting twice as much power as before.

The goal right now is to provide 10 to 12 hours of power daily throughout the country. And again, even before 2003, there was no 24- hour operations for electricity; it just was never the case. And it's not necessarily our goal to get there, but that's just kind of the metrics -- where we were in 2003 and where we're headed now.

Q Great. Thank you.

MODERATOR: And Andrew.

Q Yeah, Colonel, good morning. Andrew Lubin from U.S. Cavalry ON Point. First, I think we need to bring you back here, because it's going to be low 90s in Bucks County today, and a little grid management might be in order. Matter of fact --

COL. MOON: Well, it's about 110 here, so I'd like to be there, just at a lower heat. But go ahead, Andrew.

Q Good. Appreciate that. Can you talk a bit about what's going on in Anbar? You've got the cement plant in Ramadi, which is -- no, excuse me -- you got the glass plant in Ramadi, you got the cement plants out west -- we talked to Doug Brinkley a couple weeks ago and to General Walsh also a couple weeks ago; everything going to be finished soon? If you've got unemployed -- which means they're pretty upset people -- when are you going to get these things up and running? How is the electricity running into there?

COL. MOON: Okay. If you're talking about to the far west in a city called Qaim, which is to the far west of Al Anbar, currently they are totally isolated. And there's a new project of a new 400-kilovolt line that well connect Baiji, which is a major power plant, down to Haditha to where that hydroelectric dam is that I mentioned out to Qaim. And what's out of Qaim is a cement factory and a phosphate factory.

Q I've been there, but everybody tells -- it's going to be running soon, it's going to be running soon. But if you're unemployed, you know, "soon" is like this afternoon. "Soon" isn't another year. And we've been hearing -- with all respect to you, you're there five weeks -- we've been hearing for years, it's going to be open soon.

COL. MOON: Okay. Let me put in context for you. That's a great question, and that's a good contextual question. Let's go back to America and what it took to build what we know as the grid today. In 1882, Edison turned on the Pearl Street Electric Station; it was 53 years till the Public Utilities Act of 1935 that essentially developed the grid that we know today, and that was growth, standardization, consolidation and then regulation.

A lot of times people -- Americans are very optimistic, and we want to help, we're very compassionate.

And we forget sometimes how big a project we take on. We forget how big some of these issues are -- the scope and scale, the resources required -- and unfortunately, there are some long timelines. But the Baghdad -- the Baiji-Haditha timeline is progressing fairly well, and again, don't forget, you've got insurgents and bad guys that are impacting it, and the goal is to have that done, you know, by the end of the year. And is that good enough? No, it'll never be good enough, but in context of the scope and scale and the security situation, we've got guys that are doing incredible work under arduous conditions, doing the best they can.

Q Well, how did they run it before then? I mean, the cement plant didn't just pop up in April 2003. How did they get power before?

COL. MOON: They had a smaller --

Q Okay. You can't just crank that up again and kind of repair the lines?

COL. MOON: Well, a smaller 132 kV, which has been severely damaged by insurgents, not to mention they had a certain amount of what we call spot distribution, and that's one of the things Paul Brinkley's trying to do. Let's go ahead and get some smaller generators out there right now and get them cranked up.

Q Okay.

COL. MOON: But then you get into the whole issue of fuel, transporting fuel, the right kind of fuel, and again, you're driving through badlands.

Q Okay. Fair enough.

COL. MOON: And you know, you get into the whole corruption, the theft, the stealing, problems upon problems, but we're doing the best we can. And again, I can talk about my part, and that's that new 400 kV line, and I can reference sort of these other issues that make it extremely difficult.

Q Yeah, so you reference it back to the glass plant in Ramadi. What's the electrical situation with that plant because that's on a higher -- I think the number when I was there was 1,800 people or could hire 1,800 people, and that's substantial.

COL. MOON: Now, I do not know about the glass plant in Ramadi, but I would be happy to research and send you an e-mail.

Q Absolutely. I appreciate that. Thanks.

We're kind of Anbar-oriented, so anything you can help us out on that would be -- if you got Jack's e-mail, he'll forward it on, or he'll give you mine, however you want to work it, we'd appreciate that.

COL. MOON: Okay. Will do. And now that I know that, I'll kind of tuck that away, and if we do this again, I will definitely get a little bit more together so I can talk Anbar-specific.

Q Or if you can -- sorry -- if you check with Eric Langer (sp), he'll give you my e-mail and phone, and we'll talk whenever you want.

COL. MOON: Okay. I'd be happy to. Like I said, I will get you an answer specific on the glass plant since you asked --

Q Thank you.

COL. MOON: -- and see if I can get anything else. And again, I don't mind the dialogue.

Let me say also one thing about Al Anbar overall. Understand there's unemployment issues, but electricity wise, because of that hydroelectric plant, that's actually generating far more than they really need, and unfortunately, they don't necessarily want to share with the rest of the grid, so to speak.

So our big concern is that insurgents or terrorists are going to knock that line down again.

Q Okay.

Q Charlie, do you mind if I go on? Can I do a follow-on, do you mind, since --

Q No, go ahead, go ahead.

Q Thanks. Okay. Colonel, with Anbar -- in my opinion, probably going to break up into -- you know, it's a Sunni operation now; they got a security situation that is better than most. One thing Anbar may have, then, that the rest of the country needs to keep them happy is electricity. Do you see a situation where you've got the Kurds with oil in the north, the Shi'as with some oil in the south, and Anbar's biggest bargaining chip is it has electricity out of Haditha? And if so, how does that work to the grid system?

COL. MOON: Now, when I say they have more than they need in terms of -- they're certainly meeting their demand and a little bit excess. That is true. However, even demand in Anbar is growing. And the problem -- there's a couple problems with that. Their demand will soon exceed that generation capability of that dam, without a doubt. That is a technical certainty.

The next part is if for some reason something happens to that dam, they need a line coming in. So once they are connected to the grid, they will have to share. And it's not as simple as we're going to charge you, because it's essentially a government of Iraq resource, that dam. So it's a little bit more complex than, well, let me cut this out, and this is my dam and I'll sell you electricity. It's not quite that easy. I hope I explained that fairly well.

Q Well, I know. They just -- they kind of do that on -- it's -- to be honest with you, if they do that -- they could do that if they needed to, couldn't they?

COL. MOON: Well, there's the Ministry of Electricity --

Q Yeah, I mean, if push comes to shove -- and I spent most of the winter in Anbar and in Iraq -- if push comes to shove, could they do that and, you know, tell the minister of Electricity or whoever in Baghdad who's been hosing them, "Screw you, man, it's our electricity. And by the way, this is not a Sunni stand"?

COL. MOON: Well, I guess they'd have to get the Americans out of there, because I'm not sure we would let them do that, number one. Number two, when you say, you know, the minister has screwed them, I'm not sure why you believe that or why you say that.

Q Because General Zilmer from 1st MEF told me that when I was over there in February, because the only time the Sunnis are getting money is when General Zilmer and currently General Gaskin goes to Baghdad, and they scream at Maliki, who then reluctantly sends out a few dollars.

COL. MOON: And again, that's --

Q And this isn't -- (inaudible) -- Colonel, this is something -- you know, I'm happy to give you names and dates, otherwise. This is something that's -- this isn't that new over in the Sunni world.

COL. MOON: I understand. But again, you're talking about opinions and perceptions. And you've got a minister of Electricity that I meet with almost every single day, almost every day -- and you're talking about a guy who is under tremendous political and technical pressure and security pressure, so to speak. His son was targeted, had half his foot blown off. His son's friend was killed.

So to say that he's screwing somebody I really think is a stretch. And I understand that the maneuver commander on the ground out in Anbar might this perception that no one's helping us, but I can tell you, there's 18 governors, you know, throughout Iraq in the provinces, and they all think the minister of Electricity's screwing them. It's the kind of guy that no matter what he does, somewhere somebody's going to hate him, and unfortunately, you know, when we sort of -- when military guys no matter where they are say that, then that's what people think.

And like I said, I meet with the minister of Electricity almost every day, and the guy's under pressure, he's working his butt off, and I got to tell you something, too. He is a technocrat; he is the kind of guy you need. He has a Ph.D. in electrical engineering. He has grown up in the Iraqi electrical industry, he was a plant manager. He has worked many of these issues, generation transmission. He knows what he needs to do. He doesn't have the resources, he doesn't always have the political backing himself, in my opinion --

Q That's what General Zilmer's attitude was. You know, technically these guys -- we met with the water people. Spectacular people, but when the ministers of both those say, "No, we're going to withhold this. We're going to work in Tall Afar and screw the Sunnis or vice versa," that's what the people -- you know, the very hot Sunnis, you know, in Anbar run into.

COL. MOON: You know, but let me go back again. In fairness to whether it's the minister of water resources, the minister of electricity, they don't have -- you know, as much as we hate the bureaucracy in America, boy, I've really learned that it gets stuff done, it actually works. And the problem is there is absolutely no bureaucracy here.

So let's take the minister of Electricity. He needs to do a project. His hands are virtually tied in terms of threshold limits that he can actually commit and authorize and has permission to use. Every project he's got to put together sort of a packet, and he's got to go brief the cabinet, he's got to brief the deputy prime minister, he's got to brief the prime minister. If that system was in place in America, the Cabinet official in charge of the Department of Energy wouldn't get squat done.

There's always a different perspective. When you're down in a province, it's one thing -- all politics is local. Well, when you're in Baghdad and you see the struggling

Iraqi government and you see the lack of an effective bureaucracy, where people have authority and responsibility to spend their money, you just go, wholly cow. And it's incredible. It's -- all these guys -- and I can tell -- like I said, the minister of Electricity knows what he needs to do, his hands are tied, ineffective bureaucracy, political pressures, security issues. And again, it's a perspective thing. He's got 18 governors screaming at him, blaming him for stuff.

Q Great. Appreciate it. Thank you.

Charlie, sorry about that.

COL. MOON: Hey, sure thing. And I will get you some information on the glass plant in Ramadi.

Q Great. Thank you. Appreciate it, Colonel.

COL. MOON: Sure.

MODERATOR: All right. And Charlie, do you have any follow-up questions?

Q Yeah, just one about -- one of the sessions we had a couple of weeks ago was with a guy from, I believe, the State Department, talking about some of the PRTs that were rebuilding some industry and looking to set up networks, so that more factories could be established. Do you guys track the industry, industrial development, things like cement plants that Andrew was talking about but also leather factories that need power for some of their --

COL. MOON: I do not track individual industries, individual plants. And if you were -- you may have been talking to either Al Herman or Dave Ensign (sp) at the State Department in the Iraqi Transition Assistance Office. Was it one of those two guys?

Q I can't remember the guy's name.

COL. MOON: Okay. Just -- okay. That's not what we have tracked. I actually am setting up a meeting to go down and meet with a couple of Mr. Brinkley's folks that are -- (audio break from the source) --

MODERATOR: And hello?

Q Yeah, hello.

COL. MOON: (Audio break) -- to restart -- hello?

MODERATOR: Oh, there we go. Yeah. Sorry, sir. Your phone cut out for just a second.

Q (Audio break) -- again.

MODERATOR: And Colonel, are you still with us?

COL. MOON: Yeah. I'm sorry. I thought we got cut off or something, but --

MODERATOR: Well, yeah, for some reason, we had a glitch in the system there.

Okay. If you would continue, sir.

COL. MOON: Okay. Yeah. I actually heard Paul Brinkley speak before I came over. I'm very aware of his concept of getting what we call spot generation or distributed generation out to plants to get people employed again. And like I said, I've got -- I'm setting up a meeting now with a couple of his folks here in Baghdad to see where they are in planning.

I don't have the details you have. I'm looking definitely at the national level, the national grid, national generation. But I do need to find out more about that.

Not a great answer for you. I know it's out there, and I will learn more about it, you know, as I continue my time here.

Q Great. It was kind of like everything was dependent on getting people back to work, so that -- there were a lot of existing plants before the war that were still in pretty good shape. They could start right back up and start manufacturing things quickly. I want to make sure that there's electricity that gets to those newly reestablished plants, so that people can get back to work quickly.

COL. MOON: And that's one of the things I want to talk about, because it seems to me if it was that easy and if the connections were there, I can't believe it wouldn't have been done. And again, I don't know. I will do some research. But obviously it's not done to the level that Mr. Brinkley thinks it could be, and I want to go find out a little bit more about it myself.

So I don't have a good answer for you.

That's not, you know, one of the areas that I have tracked or have had to track, but I will find out so that I can talk better holistically about electricity, especially with regards to Mr. Brinkley's ideas of getting the state-owned enterprises back up and running, you know, in order to facilitate employment. I'll do some research on that.

Q All right, sir. And you've only been there, what, five weeks, I think it was you said?

COL. MOON: Yeah, about five weeks.

Q So in that short period of time, what are the things that you see that -- what are your long-term projections? What are your targets?

COL. MOON: The target is to hit 6,000 megawatts this summer of generation to the grid. And again, that is not going to meet 100 percent of the demand. The demand is so far outstripping supply, we're never going to get there. But each time the minister gets his generation to hit another milestone, if he can improve his maintenance, if we can continue to add generation -- if we can get through the summer peak, if we can hit 6,000 megawatts, that will definitely be a success. As we head into the fall, the goal's going to be to do some serious maintenance on a lot of the turbines, the generators, in order to facilitate long-term growth and health of the system, so to speak.

Technically, none of the issues that we face are hard. The issues are political, security, which are just so daunting sometimes. It's so easy to disrupt the electrical system. It's so easy to pull down a tower and essentially, you know, cause a blackout across the country. There was a big blackout in the Northeast just a few years ago -- I think it was 2003. A telephone pole falls in an ice storm, and what happens is you have a transient, you have a problem that runs through the lines, you get a cascading effect. Electricity is not like water. I mean you store water in a reservoir. Electricity has to be generated to meet the demand on a near-instantaneous basis. And if you get into the real technical parts of it, it is almost impossible to develop a national grid on a rolling blackout system. It's incredibly complex. It's technical. It requires a great deal of cooperation which, again, in our society we've had 100-plus years of improving it and making it work with long-range planning always looking out ahead to meet, you know, the growth of our nation. And that has not been the case in Iraq, where you've had infrastructure deterioration for over 20 years and they haven't had 24-hour electricity to begin with.

Just incredibly challenging. But if we can hit 6,000 this summer, that'll be a huge feat, which speaks volumes to the dedication of the Ministry of Electricity employees, as well as a lot of contractors that are out there in dangerous circumstances doing the best we can to improve, you know, this essential service for the Iraqi people.

MODERATOR: Well, thank you, sir, for joining us today, and --

Q Jack, can I -- Colonel, you got time for one more quick question?

COL. MOON: Sure, I do, yeah. Okay. We've got a few minutes.

Q You know, this 6,000 goal sounds -- what is the demand? I understand -- (audio break). You know, 5,000 is great, 6,000 better. What do you need to balance the place out, do you think? And I understand that the demand is growing --

COL. MOON: Probably about 11,000 to 12,000 megawatts.

Q Wow.

COL. MOON: And that's just a -- it's a rough guess if you're meeting about 50 or so, and remember, demand's going to go up anyway in the summertime. So as the demand goes up, obviously you want your supply to go up, but you can almost probably just say, you know, multiply by two.

Q Okay.

COL. MOON: That's how bad it is. But again, every little bit helps. You show progress, and as we come through the summer, when we start the cooler season, the big issue is getting on top of maintenance as we go through the fall and the winter when there's not the demand for electricity in order to ramp up again, hopefully in a much, much better state then next year.

Like I said, when we hit 5,000 -- a little over 5,000 megawatts, we're meeting 56 percent of the demand.

Q Are you able to tie into Jordan or Iran at all? Are you able to work through a regional grid?

COL. MOON: Iran currently connects to a small isolated area down in the southeast. We also have a connection with Turkey in the northwest, and we also have a connection from Syria. However, it's important to understand that those -- what they're doing is they're feeding very isolated places within Iraq. An electrical system, a grid, has to be kept in a balance. In America, you know, we run at 60 hertz, and what's supposed -- the grid in Iraq is supposed to be running at 50 hertz. They don't run at 50 hertz; they're running below that anywhere from 49.4 to 49.8, which really is on the verge of instability.

So you are not going to get Iran, Turkey, Syria, Jordan, whatever, that want to link in because as soon as you link in, you have synchronization problems with the hertz, the cycles, and then when you have what we call a transient or a problem, that cascading effect, the last thing you want, the Iranians or the Turks or anyone else, they don't want a blackout in Iraq affecting their grid.

It's as simple as that. So they'll service some isolated areas, but they don't want to tie in right now to the instability.

Q That's too bad. Okay, fair enough. Thank you.

COL. MOON: Sure.

MODERATOR: All right, sir. Very good. Very enlightening. And I appreciate all you're doing there. And hopefully we can do this again towards the end of the

summer or first part of fall, kind of see where we are and, you know, basically do a progress check. And hopefully you can join us again.

COL. MOON: Hey, thanks very much, guys. A real pleasure. It's important to get the word out. And it's good to know what you guys are thinking and what you're hearing from other places too.

Q Appreciate it. Colonel, good to talk to you. Thank you for the time today.

COL. MOON: Thanks. Take care. Have a good day. Bye-bye.

MODERATOR: Thank you, sir.

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